



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/420,616	10/18/1999	WILLIAM JOSEPH BEYDA	99P7918US	3051

7590 04/21/2004

SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
186 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

DUONG, FRANK

ART UNIT PAPER NUMBER

2666

DATE MAILED: 04/21/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/420,616

Applicant(s)

BEYDA ET AL

Examiner

Frank Duong

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2666

DETAILED ACTION

1. This Office Action is a response to the amendment dated 2/26/2004. Claims 1-14 and 16 are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-14 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding **claims 1-4**, there is no support for the claimed limitation of "*means for adjusting a length of said one or more information packets for input to said jitter buffer based on a sized of said jitter buffer*" (emphasis added by Examiner)", recited in claim 1, lines 6-7, in the specification. In accordance with the specification, on page 6, lines 9-24 and thereafter, in reference to FIG. 3, it is disclosed "*the controller 110 monitors a size of the jitter buffer 113 and the size of data packets being packetized in the packetizer 80. If the packet size is less than a predetermined threshold related to jitter*

Art Unit: 2666

buffer size, then the packet size is increased to the threshold level. If the two endpoints have different sized jitter buffers, then the packet size may be set to the greater of the two". From the disclosed features, the claimed limitation of "*means for adjusting a length of said one or more information packets for input to said jitter buffer based on a size of said jitter buffer*", recited in claim 1, lines 6-7, cannot unambiguously derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding **claims 5-8**, there is no support for the claimed limitation of "*adjusting a length of said one or more information packets for input to said jitter buffer based on a sized of said jitter buffer*" (emphasis added by Examiner)", recited in claim 5, lines 4-5, in the specification. In accordance with the specification, on page 6, lines 9-24 and thereafter, in reference to FIG. 3, it is disclosed "*the controller 110 monitors a size of the jitter buffer 113 and the size of data packets being packetized in the packetizer 80. If the packet size is less than a predetermined threshold related to jitter buffer size, then the packet size is increased to the threshold level. If the two endpoints have different sized jitter buffers, then the packet size may be set to the greater of the two*". From the disclosed features, the claimed limitation of "*adjusting a length of said one or more information packets for input to said jitter buffer based on a sized of said jitter buffer*", recited in claim 5, lines 4-5, cannot unambiguously derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Art Unit: 2666

Regarding **claims 9-13**, there is no support for the claimed limitation of “*wherein each of said plurality of endpoints includes a jitter buffer controller configured to adjust a packet size of packets being input to said jitter buffer for communication over said packet network*”, recited in claim 9, lines 5-7, in the specification. In accordance with the specification, on page 6, lines 9-24 and thereafter, in reference to FIG. 3, it is disclosed “*the controller 110 monitors a size of the jitter buffer 113 and the size of data packets being packetized in the packetizer 80. If the packet size is less than a predetermined threshold related to jitter buffer size, then the packet size is increased to the threshold level. If the two endpoints have different sized jitter buffers, then the packet size may be set to the greater of the two*”. From the disclosed features, the claimed limitation of “*wherein each of said plurality of endpoints includes a jitter buffer controller configured to adjust a packet size of packets being input to said jitter buffer for communication over said packet network*”, recited in claim 9, lines 5-7, cannot unambiguously derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding **claim 14**, there is no support for the claimed limitation of “*a controller coupled to the codec, the jitter buffer, and the packetizer, wherein the controller is configured to cause the packetizer to adjust a packet size if said packet size is related to a jitter buffer size according to predetermined criteria, such that packets received at said jitter buffer are of a new size* (emphasis added by Examiner) wherein the predetermined criteria in a threshold fraction of the jitter buffer size”, recited in claim 14, lines 5-9, in the specification. In accordance with the

Art Unit: 2666

specification, on page 6, lines 9-24 and thereafter, in reference to FIG. 3, it is disclosed *"the controller 110 monitors a size of the jitter buffer 113 and the size of data packets being packetized in the packetizer 80. If the packet size is less than a predetermined threshold related to jitter buffer size, then the packet size is increased to the threshold level. If the two endpoints have different sized jitter buffers, then the packet size may be set to the greater of the two"*. From the disclosed features, the claimed limitation of *"a controller coupled to the codec, the jitter buffer, and the packetizer, wherein the controller is configured to cause the packetizer to adjust a packet size if said packet size is related to a jitter buffer size according to predetermined criteria, such that packets received at said jitter buffer are of a new size"*, recited in claim 14, lines 5-8, cannot unambiguously derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding **claim 16**, the claimed limitation of *"adjusting said packet size if said packet size is related to said jitter buffer size threshold according to predetermined criteria"*, recited in claim 16, lines 5-6, encompasses every possible scenarios. Take for example, the specification does not disclose the encoder, decoder, jitter buffer or the analog/digital converter of Fig. 3 adjusts the packet size. Moreover, the *"predetermined criteria"* includes packet size is *"greater than the threshold"*. Definitely, it is not disclosed, in the specification, the packet size is adjusted according to the packet size is *"greater than the threshold"*.

Art Unit: 2666

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(note: Due to the problems discussed in the 112, first paragraph rejection discussed above, new limitations introduced in the communication dated 7/31/03 or 8/29/03 to claims 1-14 are not considered)

3. Claims ^{9, 13, 14}9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Guy et al (USP 5,940,479) (hereinafter "Guy").

Regarding **claim 9**, in accordance with Guy reference entirety, Guy shows a telecommunication system (FIGs. 1 and 3) comprising:

a packet network (104);

a plurality of endpoints (101A and 101B) coupled to said packet network (104), each of said plurality of said endpoints including a jitter buffer (316);

wherein each of said plurality of endpoints including a jitter buffer controller (320) configured to adjust a packet size for communication over said packet network (see col. 9, lines 34-65 and col. 17, line 39 to col. 18, line 14).

Regarding **claim 13**, in addition to features recited in base claim 9 (see rationales pertaining the rejection of base claim 9 discussed above), Guy further discloses wherein said endpoints comprise client terminals (106, 108 and 129).

Art Unit: 2666

Regarding **claim 14**, in accordance with Guy reference entirety, Guy shows a telecommunication system (FIGs. 1, 2 and 3) comprising:

a codec (FIG. 2; block 206A);

a jitter buffer (FIG. 2; block 206B and FIG. 3; block 316) coupled to an input of the codec;

a packetizer (FIG. 2; block 206B and FIG. 3; blocks 318 and 320) coupled to an output of the codec; and

a controller (FIG. 2; block 206B and FIG. 3; block 320) coupled to the codec, the jitter buffer, and the packetizer, wherein the controller is configured to cause the packetizer to adjust a packet size if said packet size is related to a jitter buffer size according to predetermined criteria (*network delay*) (see col. 17, line 30 to col. 18, line 14) wherein the predetermined criteria (*network delay*) is a threshold fraction of the jitter buffer size (see col. 17, lines 57-58).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guy.

Regarding **claim 1**, in accordance with Guy reference entirety, Guy discloses a telecommunication node (Fig. 3), comprising:

Art Unit: 2666

a jitter buffer (316) (see col. 9, lines 34-39);

means for receiving (306, 302 and 304) one or more information packets (*voice signals*), said receiving means including means for storing (304) said one or more information packets in said jitter buffer (see col. 8, lines 56-63); and

means for adjusting (320) a length of said one or more information packets based on a network delay (see col. 9, lines 59-65 and col. 17, line 39 to col. 18, line 4).

Guy fails to explicitly teach adjusting a length of the packet based on the size of said buffer. However, at col. 9, lines 34-39, 59-65, Guy discloses the voice enhancement unit can also dynamically adjust the rate of the bit stream from 8 kbps to a slower rate, e.g., 6.4 kbps or 4.8 kbps. Moreover, at col. 17, lines 65-67, Guy discloses increasing the jitter buffer 316 also increases the network delay since the jitter buffer 316 stores the voice frames for a time duration that is proportional to the size of the jitter buffer 316. And at col. 10, lines 64-65, Guy also teaches converting a data packet to a compatible format is apparent to persons skilled in the relevant art. All of the above recitation relates to "*adjusting a length of the packet based on the size of said buffer*" to enhance the voice signal quality as well as compatible format.

Thus, it would have been obvious to those skilled in the art to adjust a length of the packet based on the size of the jitter buffer with a motivation to convert voice signals into a network compatible format.

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales pertaining the rejection of base claim 1 discussed above), Guy further discloses said adjusting means (320) including means for adjusting said length to a predetermined

Art Unit: 2666

fraction (*network delay*) of said size of said jitter buffer (*see col. 17, line 39 to col. 18, line 13*).

Regarding **claim 3**, in addition to features recited in base claim 2 (see rationales pertaining the rejection of base claim 2 discussed above), Guy further discloses means for monitoring (320) a size of said jitter buffer during a communication (*see col. 17, lines 60-61*).

Regarding **claim 4**, in addition to features recited in base claim 3 (see rationales pertaining the rejection of base claim 3 discussed above), Guy further discloses said adjusting means (320) including means responsive to said monitoring means for adjusting said length to a new size of said jitter buffer (316) during said communication (*see col. 17, line 30 to col. 18, line 14*).

Regarding **claim 5**, in accordance with Guy reference entirety, Guy discloses a telecommunication method (*FIG. 3*), comprising:

receiving (306, 302 and 304) one or more information packets, said receiving including storing said one or more information packets in a jitter buffer (316) (*see col. 17, lines 15-38*); and

adjusting (320) a length of said one or more information packets based on a network delay (*see col. 17, line 39 to col. 18, line 14*).

Guy fails to explicitly teach adjusting a length of the packet based on the size of said buffer. However, at col. 17, lines 65-67, Guy discloses increasing the jitter buffer 316 also increases the network delay since the jitter buffer 316 stores the voice frames for a time duration that is proportional to the size of the jitter buffer 316. And at col. 10,

Art Unit: 2666

lines 64-65, Guy also teaches converting a data packet to a compatible format is apparent to persons skilled in the relevant art.

Thus, it would have been obvious to those skilled in the art to adjust a length of the packet based on the size of the jitter buffer with a motivation to convert voice signals into a network compatible format.

Regarding **claim 6**, in addition to features recited in base claim 5 (see rationales pertaining the rejection of base claim 5 discussed above), Guy further discloses said adjusting (320) including adjusting said length to a predetermined fraction (*network delay*) of said size of said jitter buffer (*see col. 17, line 39 to col. 18, line 13*).

Regarding **claim 7**, in addition to features recited in base claim 6 (see rationales pertaining the rejection of base claim 6 discussed above), Guy further discloses monitoring (320) a size of said jitter buffer during a communication (*see col. 17, lines 60-61*).

Regarding **claim 8**, in addition to features recited in base claim 7 (see rationales pertaining the rejection of base claim 7 discussed above), Guy further discloses said adjusting (320) including adjusting said length to a new size of said jitter buffer (316) during said communication (*see col. 17, line 30 to col. 18, line 14*).

5. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guy in view DataBeam Corporation White Paper (*A Primer on the H.323 Series Standard, pages 1-17, May 15, 1998*) (hereinafter "DataBeam").

Regarding **claims 10-11**, Guy teaches the features recited in base claim 9 (see *rationales pertaining the rejection of base claim 9 discussed above*). Moreover, at col.

Art Unit: 2666

17, lines 60-62, Guy further discloses jitter buffer 316 has a size that is set by a user as a configuration protocol.

Guy fails to explicitly disclose wherein said buffer controller is configured to compare a proposed packet size with a threshold value representative of a fraction of said jitter buffer size responsive to an H.323 terminal capability exchange (*negotiate channel usage*).

On the other hand, DataBeam (*see the document entirety*) provides an overview of the H.323 standard providing a foundation for audio, video and data communications across IP-based networks. Specifically, on page 4, DataBeam discloses all H.323 terminals must also support H.245, which is used to negotiate channel usage and capabilities.

It would have been obvious to those skilled in the art to implement the H.323 standard with the negotiating channel usage into Guy's system to arrive the claimed invention with a motivation of allowing users to communicate without concern for compatibility.

Regarding **claim 12**, Guy discloses wherein said jitter buffer controller (320) is configured to monitor a size of said jitter buffer during a communication and adjust a packet to a new size during a communication (*see col. 17, line 39 to col. 18, line 14*).

Thus, Guy in view DataBeam discloses the claimed invention.

Response to Arguments

6. Applicant's arguments filed 2/26/2004 have been fully considered but they are not

Art Unit: 2666

persuasive. Applicants' arguments will be addressed hereinbelow in the order in which they appear in the response dated 2/26/2004.

In the Remarks of the outstanding response, on page 5, pertaining the rejection under 35 U.S.C, first paragraph of claims 1-4, Applicants assert the claimed limitation of *"means for adjusting a length of said one or more information packets for input to said jitter buffer based on a size of said jitter buffer"* is disclosed in the specification. To support the assertion Applicants recited the passages in the Summary of the Invention and on page 3 of the specification.

In response Examiner respectfully disagrees and asserts the claimed limitation of *"means for adjusting a length of said one or more information packets for input to said jitter buffer based on a size of said jitter buffer"*, not supported or disclosed in the specification to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention for the following rationales:

First, the passages pointed out by the Applicants in the specification clearly states *"a threshold of packet length as a fraction of jitter buffer size is established"* or *"a predetermined threshold (typically, a fraction of the jitter buffer size)"*, not *"a size of said jitter buffer"*, but a "threshold" related.

Second, the jitter buffer controls 110a and 110b don't just blatantly adjust (increase) the packet size, but increase the packet size if the packet size is lower than the predetermined threshold of the jitter buffer; otherwise, the packet size is left alone, contradistinction to the claimed limitation and Applicants' argument.

Art Unit: 2666

Third, Examiner recognizes the Applicants are their own lexicographers. However, whatever the Applicants call in the claims must be fully supported in the specification.

Same rationales discussed above applied to the response for the arguments pertaining the rejection under 35 U.S.C, first paragraph of claims 5-14 and 16.

As for the art rejection, due to the problems discussed in the 112, first paragraph rejection discussed above, new limitations introduced in the communication dated 7/31/03 or 8/29/03 to claims 1-14 and 16 are not considered.

Examiner believes an earnest attempt has been made in addressing all of the Applicants' arguments. Due to the amendment does not present the application in a better condition for allowance and the arguments are not persuasive, the rejection from the last Office Action is maintained.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is (703) 308-5428. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Frank Duong', with a stylized, flowing script.

Frank Duong
Examiner
Art Unit 2666

April 18, 2004